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Longitudinal plunging unit with cage securing means

Abstract

The invention relates to a longitudinal plunging unit 24 for a shaft assembly for transmitting torque. The longitudinal plunging unit comprises a profiled sleeve 25 with circumferentially distributed, longitudinally extending first grooves 26; a profiled journal 1 with circumferentially distributed, longitudinally extending second ball grooves 6, wherein the profiled journal 1, by means of its end 2 facing the profiled sleeve 26, engages said profiled sleeve 25; balls 11 arranged in groups in pairs of first ball groove 26 and second ball grooves 6; and a ball cage 10 which, in the radial direction, is positioned between the profiled sleeve 25 and the profiled journal 1 and fixes the balls 11 in their axial position relative to one another. The ball cage 10 is displaceable relative to the profiled journal 1 between spaced axial stops. On the profiled journal 1, there is arranged a stop sleeve 13, which can abut the profiled journal 1 or a component connected thereto. The stop sleeve 13 delimits the displacement path of the ball cage 10 towards the second portion.

Figure 1